GEO Engineering

150 Mineral Spring Drive
Dover, New Jersey 07801
201 361-3600 FAX 361-3800

October 31, 1994

Douglas Stuart, Chief
New Jersey Department of Environmental Protection
Bureau of Environmental Evaluation & Cleanup Responsibility Assessment
401 East State Street, 5th floor
Trenton, NJ 08625

SUBJ: **Hexcel Corporation**
Lodi Borough, Bergen County, NJ
ISRA Case No. 86009

Dear Mr. Stuart:

We have been asked by Hexcel's authorized agent, Porzio, Bromberg and Newman, to review a letter prepared by Matrix Environmental Management, Inc., (Matrix) dated October 13, 1994. The October 13 Matrix letter, based on what appears to be an incomplete review and understanding of the status of the remediation, proposed an alternative cost estimate. This alternative cost estimate is, we believe, excessive and inconsistent with departmental guidance for cost estimates. The Matrix letter was transmitted to you with a cover letter from Kummer, Knox, Naughton and Hansbury, dated October 19, 1994. These letters refer to GEO Engineering's letter of May 5, 1994, which contained a cost estimate for remediation in compliance with ISRA requirements.

Hexcel's May 5 estimate from GEO Engineering was summarized in a table with six major divisions designated Tasks I through VI. The estimate provided a range of the remedial costs in the vicinity of $4,000,000; and was revised by letter dated September 30, 1994 to specify an estimated total of $3,866,000. The May 5 estimate relied in part on an estimate prepared by Killam Associates, Hexcel Corporation's previous environmental consultant.

At the outset, it should be noted that Matrix clearly states that they agree with the costs outlined by GEO Engineering for Tasks II through VI. Therefore, there appears to be no dispute as to the costs estimated by GEO Engineering for Tasks II through VI.

Additionally, it is necessary to observe that Hexcel's May 5 cost estimate contains considerable contingency cushion as we expressed in our September 30, 1994 letter and in our meeting with the New Jersey Department of Environmental Protection (NJDEP) on October 3, 1994. For example, the estimate of one million to design, permit and install the vapor extraction system is, in our experience, high. Nevertheless, Hexcel has agreed to leave in place the $4 million funding source. This amount, however, is adequate in our estimation to complete the remediation. What follows is an explanation of why we believe

the points raised by Matrix should be dismissed by the NJDEP and the amount of the funding source be retained at $4 million.

Matrix raised a concern that the estimate for Task I, covering the permitting of the discharge of treated ground water, was low based on their experience in obtaining such permits (see page 4 of Matrix letter). What Matrix may not have known was that these permits have already been acquired, with the exception of a stream encroachment permit. In addition, the stream encroachment permit has already been classified as minor by the NJDEP. Therefore, Matrix's criticism reflects a lack of information concerning the status of the permits and raises some concern that their estimate was based on limited information. Accordingly, the $100,000 estimated by Matrix is not, in fact, appropriate.

Additional/Speculative Tasks

Matrix also asserted that some items may have been missed in the estimate or should be added based on additional NJDEP requirements.

Hexcel's May 5 cost estimates reflect the tasks included in the NJDEP-approved cleanup plan. This is consistent with standard NJDEP procedures and requirements. Section 7:26E-6.2 of the "Technical Requirements for Site Remediation" specifies that cost estimates will be provided for remedial actions included in the cleanup plan ("remedial action work plan"). Similarly, the Industrial Site Recovery Act (ISRA) specifies that a cleanup plan shall include a cost estimate of the implementation of planned remedial actions. The NJDEP does not require speculation of cleanup actions that might become necessary or worst case estimates of scenarios that hypothetically might occur.

Contrary to the regulations and standard NJDEP procedures, Matrix listed in their letter several items which they thought were erroneously overlooked or should be added to the estimate. Enormous dollar numbers were associated with these items which were highly speculative and inappropriate considering the lack of information on which they were based. Moreover, Matrix seeks the inclusion of items that are not included in the approved remediation. We address each of these items individually below. They are discussed in the order in which they are presented in the "Summary of Costs" table on page 5 of the Matrix letter.

1. Investigation of the Opposite Bank of the Saddle River.

Matrix, without any apparent basis, apparently assumes that DNAPL will be found on the opposite side of the river and that an expensive cleanup of the DNAPL will ensue (see page 3 of the Matrix letter). Accordingly, they have suggested a cost estimate of $1 million for this. The investigation of the opposite bank of the Saddle River is, however, already included in the GEO Engineering estimate provided in May. The investigation already included in the May cost estimate would comprise sampling of ground water through off-site wells or borings. We estimated that approximately $25,000 would be needed for this work.

The Matrix financial assurance figure is based on a worst-case, unfounded scenario. There is no indication that there is DNAPL on the opposite side of the Saddle River. Therefore, estimating the cost of remediating a problem not even diagnosed is highly speculative and inappropriate.

While we understand the NJDEP's desire to confirm the absence of DNAPL on the opposite side of the Saddle River, and have therefore agreed to investigate this, we believe that there are factual indications that DNAPL has not crossed the river. Therefore, estimating the cost for remediation of DNAPL on the opposite side of the river is inappropriate. Moreover, we believe that even the investigatory costs that have been included in the $4 million dollar fund are excessive. Recently, we learned that there are already three monitoring wells on the other side of the Saddle River and are attempting to obtain well construction information and ground water sampling data for those wells. Thus, it is entirely possible that the off-site investigation will cost even less than the $25,000 initially estimated by Hexcel.

2. Investigation of PCB Contamination at Storm Sewer Outfall.

Matrix is correct that the cost for investigating PCB contamination at a storm sewer outfall was not included in the May cost estimate, since it was a recent addition contained in the NJDEP's letter of September 15, 1994 (see page 3 of the Matrix letter). We estimate that this additional investigation will cost between $5,000 and $10,000, and therefore Hexcel's $3.9 million dollar remediation figure should be increased by that amount. The figure should not be increased by the $500,000 suggested by Matrix. It appears that the basis for this figure is the assumption that conditions will warrant remediation of sediments in the river. Previous testing of sediments in the river, however, indicate that concentrations may be within NJDEP standards. The NJDEP has asked Hexcel to confirm this and Hexcel has agreed to do so. Because there are no facts which indicate that remediation of the river sediment will be required, and no plan for such remediation is included in the approved cleanup plan, it is inappropriate to suggest a hypothetical cost estimate number based on unfounded supposition.

3. Investigation and Remediation of DNAPL in Bedrock.

Matrix provides a lengthy explanation of why the presence of DNAPL in bedrock in their opinion is a possibility (see pages 2 and 3 of Matrix letter). The discussion of general geologic ideas, however, appears to have little to do with the site in question. For example, Matrix discusses the rate of DNAPL penetration in the vadose zone, but ignores the rate of penetration in a saturated, layered geology. The rate of penetration in the vadose zone is entirely irrelevant because the DNAPL at the Hexcel site would need to penetrate 60 feet of saturated materials including clay layers and other layered materials before it can even reach the bedrock. Penetration rates in the vadose zone have nothing to do with the penetration rates in the saturated materials.

The discussion by Matrix goes on to describe the movement of DNAPL in the bedrock. This, of course, will not occur until the DNAPL has penetrated the 60 feet of material to the bedrock. Therefore, the discussion, while of some general interest, has no application to the geology of this site in particular.

Moreover, there are no facts to indicate that DNAPL is in the bedrock. However, Matrix suggests a very large dollar figure to cover remediation of DNAPL in the bedrock, even though there is no indication of DNAPL being there. As with the previous items, it is entirely inappropriate for an ISRA estimate to be based on pure speculation. Therefore, the dollar figure suggested by Matrix has no place in a remediation cost estimate, and is inconsistent with the NJDEP's estimating procedures.

4. Permitting Costs for Task I.

This was discussed above. Adding cost estimates for permitting is unwarranted as we are sure Matrix will agree once they understand that the permits have been acquired.

5. Management of Contaminated Soils from Sewer Line Installation.

While the management of soils displaced as a result of the sewer line installation is a relatively minor cost item in the Matrix letter (see page 4 of the Matrix letter), Matrix is incorrect in stating that it was not included in the prior estimate. Although most soil on the property is to be treated through a vapor extraction system, Killam Associates, who conducted the original planning, allowed for the cost of removing approximately 500 cubic yards of soil which did not lend itself to vapor extraction treatment. The sewer line runs through an area where previous tests indicate that contaminants are generally low or non-detected. Therefore, the cost of excavation and removal of soil during sewer construction should be low or non-existent. Should some volume of contaminated soil be encountered during construction of the sewer line, the soil's removal has already been planned for and is easily accommodated by the budget prepared for soil remediation.

6. DNAPL Barrier - Engineering Design and Installation.

Investigation of the efficacy of a DNAPL barrier along the Saddle River was referenced in the May cost estimate in response to further suggestions by the NJDEP. While we currently do not believe that such a barrier is appropriate, we are nevertheless investigating the matter. The DNAPL barrier would not be employed unless it was justified and reduced the cost of DNAPL remediation through other means. Moreover, if the DNAPL barrier were constructed, its cost would be offset by reductions in DNAPL remediation costs in other parts of the program. Accordingly, it is inappropriate to increase the cost estimate to cover the construction of a barrier which may not be required and the cost of which cannot be fully evaluated until its impact on the rest of the system has been determined. Accordingly, construction of a barrier in the estimated amount of $200,000, as suggested by Matrix, should not be included as a cost item in the estimated remedial costs (see page 4 of the Matrix letter).

7. Treatment Plant Operator.

Matrix suggests that $210,000 is needed to cover the costs of a treatment plant operator (see page 4 of Matrix letter). A licensed treatment plant operator is not required and the cost for such should not be included in a cost estimate. We have attached for your reference an August 2, 1993 letter to the Passaic Valley Sewerage Commissioners, the lead agency for monitoring the discharge of treated water, which confirms that a licensed operator is not needed full-time at the plant. In fact, our plan is to make use of system automation improvements to further reduce the cost of system operation beyond those envisioned for Hexcel's May estimate. Similarly, the May estimate did include the cost of treatment plant operations.

8. Disposal of Treated Water.

The disposal of treated ground water prior to the construction of a sewer connection by the PVSC was the subject of our recent correspondence and our meeting with the NJDEP on October 3, 1994. The NJDEP agreed that the trucking of treated ground water was neither necessary nor appropriate and agreed to await the construction of the sewer connection before the ground water treatment system is turned on. Fine Organics has agreed to endorse the CP#1 form for the stream encroachment permit. If they do so in a timely fashion, we estimate that the sewer will be constructed within two to three months and that the system can then be operated at full capacity. Therefore, the Matrix $1.9 million estimate for trucking and disposal of treated ground water for a one-year period is clearly inappropriate (see page 5 of Matrix letter). It is true that the trucking and disposal of treated basement water, which is running approximately 3500 gallons per month, was not included in the May estimate. Therefore, Hexcel's $3.9 million estimate should be increased by approximately $11,000 to cover the cost of this trucking and disposal for the next two to three months.

9. PCB Remediation, Building #1.

The interior of Building 1 was decontaminated several years ago when it was the NJDEP policy to require such building decontamination. The report of this decontamination was provided to the NJDEP in a progress report dated January 10, 1991. No further decontamination of Building 1 is deemed necessary other than sludge removal from the bottom of the basement which is a component of the May estimate. Similarly, the PCB remediation beneath Building 1 is envisioned by and included in the May estimate. Accordingly, PCB remediation in the estimated amount of $2,100,000, as suggested by Matrix, should not be included as a cost item in the estimated remedial costs (see page 5 of Matrix letter).

10. Consultant Fees.

While we are not entirely clear what Matrix means by the consulting fees they estimate at $1 million (see page 5 of the Matrix letter), we nevertheless believe consulting service fees are contained in Hexcel's May estimate. The May estimate included engineering, permit preparation and oversight fees which are generic descriptions of the activities generally included under the category of consultant fees.

Conclusion

In summary, approximately $21,000 should be added to the $3,866,000 estimate to cover two items not included in the estimate. This results in a cost estimate of $3,887,000 (see enclosed Table 1), which, of course, is still within the $4 million in financial assurance that is in place. The items suggested by Matrix are either already included in the May estimate or so speculative in nature as to be entirely inappropriate to include. Inclusion of such speculative items is inconsistent with the NJDEP's procedures for estimating ISRA-related costs.

If you require any further elaboration of the points we have made or wish to see any additional documentation, please do not hesitate to call. We trust that the NJDEP will reject the demand that Hexcel's financial assurance be increased.

Sincerely,

GEO ENGINEERING, INC.

Marjorie A. Piette
Project Manager

John A. Rhodes, P.E.
Vice President

MAP/JAR/avm
Enclosure
cc: Wayne Howitz, Assistant Director
Joseph Nowak, Case Manager
Lisa Bromberg, Esq.
A. William Nosil
Robert Krumme, Esq.
Michael Naughton, Esq.
John Newman, Esq.

TABLE 1. COST ESTIMATE
Former Hexcel Facility
Lodi, New Jersey

GEO Engineering, Inc.
October, 1994
file:94039\cost1.xls

TASKS SPECIFIED IN 2/24/94 LETTER	COST ESTIMATE (in thousands)
I. Discharge Permit Issues	$26
II. Air Permit Issues (including acid gas control)	$150
III. System Startup Activities	
A. Operation and Performance Assessment	$50
B. Modifications to System	$100
C. Full Scale Operation	$1,100
D. Hazardous Waste Disposal	$250
IV. Pilot Scale Studies of Soils Remedial Alternatives	$615
V. Sewer Line Cleaning/Abandonment	$375
VI. Air Sparging/Vapor Extraction System (design/specify/permit/install/operate)	$1,100
SUBTOTAL	$3,766

ADDITIONAL ITEMS	COST ESTIMATE (in thousands)
Temporary DNAPL Recovery	$65
Off-Site Testing (install wells/Geoprobe/sample)	$25
Construct DNAPL Barrier (if appropriate)	To be estimated after design if determined to be necessary
Bedrock Ground Water Investigation (in the vicinity of MW-1 and MW-17)	$10
Stream sediment sampling	$10
Temporary trucking and disposal of treated water	$11
SUBTOTAL	$121

TOTAL ESTIMATED COST	$3,887